

H₂ while the chamber is at a low pressure and increasing the pressure one the reaction begins.

30 (New). The method of claim 9 and further comprising the step of introducing O₂ and H₂ while the chamber is at a low pressure and increasing the pressure one the reaction begins.

31 (New). The method of claim 16 and further comprising the step of introducing O₂ and H₂ while the chamber is at a low pressure and increasing the pressure one the reaction begins.

32 (New). The method of claim 26 wherein said oxidizing step comprises the step of oxidizing a portion of said insulating layer and said silicon-containing structure while leaving said conductive structure substantially unoxidized by introducing said oxygen-containing gas and said hydrogen containing gas while the chamber is at a low pressure and increasing the pressure one the reaction begins.

REMARKS

This application has been carefully reviewed in light of the Office Action dated July 5, 2000. Applicant has amended claims 1, 9, 16, 20, 22, 24, 26, 27 and added claims 29-32. Reconsideration and favorable action in this case are respectfully requested.

The Examiner has rejected claims 1-2, 5-9, 12-15, 20, 22, 26 and 27 under 35 U.S.C. §102(e) as being anticipated by U.S. Pat. No. 5,907,188 to Nakajima et al. Claims 21, 23 and 28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Nakajima. Claims 16, 24 and 25 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Pat. No. 5,352,620 to Komori et al, in view of Nakajima.

Applicant has reviewed this application in detail, and does not believe it shows the invention as claimed. In particular, the Nakajima reference does not discuss any limitation on pressure caused by a reaction between H₂ and O₂. As described in the

present specification, the combination of H₂ and O₂ can result in extremely high, if not explosive, pressures, which can be dangerous both to equipment and personnel.

Claims 1, 9 and 16 have been amended to specify that the reaction between H₂ and O₂ is controlled such that the pressure in the chamber does not increase beyond a predetermined level. Claim 26 has been similarly amended although the reacting gases include an oxygen-containing gas selected from the group consisting of O₂, N₂O, CO₂ and a separate hydrogen-containing gas. This aspect of the invention is neither disclosed nor suggested in the cited references.

Dependent claims 20, 22, 24 and 27 describe a specific method for maintaining pressure below a predetermined level. Namely, the O₂ and H₂ are introduced in a portion of a process chamber's total volume, such that the reaction between O₂ and H₂ occurs continuously as the O₂ and H₂ enter the chamber.

This aspect of the invention provides significant advantages over filling the chamber with O₂ and H₂ and heating the chamber to react the two gases, which can be extremely dangerous. This subject matter is neither disclosed nor suggested in the cited references.

New dependent claims 29, 30, 31 and 32 describe an alternative method of maintaining the pressure of the chamber below a predetermined level. In this case, the O₂ and H₂ (or, in the case of claim 32, an oxygen-containing gas selected from the group consisting of O₂, N₂O, CO₂ and a separate hydrogen-containing gas) are introduced into the chamber while the chamber is at a low pressure, and the pressure may be increased once the reaction begins. This aspect is not disclosed or suggested by the cited references.

Claims 21, 23, 25 and 28 describe an additional alternative method of maintaining the pressure of the chamber below a predetermined level. In this case, the O₂ (or oxygen

containing gas) and H₂ (or hydrogen containing gas) are introduced in a predetermined ratio, and the concentration of one of the gases is increased after the reaction begins. This technique can be used to minimize the shock of the reaction to the chamber. The references cited by the Examiner do not disclose or suggest this aspect of the invention.

An extension of two months is requested and a Request for Extension of Time under § 1.136 with the appropriate fee is attached hereto.

The Commissioner is hereby authorized to charge any fees or credit any overpayment, including extension fees, to Deposit Account No. 20-0668 of Texas Instrument Incorporated.

Applicants have made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Mark Valetti, Applicants' Attorney at 972-917-4438 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,



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